

UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

Date : Week ended 2 March 1972  
Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

Monday	28 February	processing of internal monthly invoices, 2100-2215.
Tuesday	29 February	system failure, offline 1126-1138, 1900-1915, 2125-2140.
Wednesday	1 March	end of day accounting, which aborted previous night, 0945-1025 system failure, offline 1100-1120 card reader maintenance, batch processing delayed 2015-2037.
Thursday	2 March	system failure, offline 1055-1140.

schedule for forthcoming week: maintenance 0700-0900  
operations 0945-2330.

1.2 GE-225 System

schedule for forthcoming week: maintenance 0700-0830  
operations 0900-2400.

## 2. LOW PRIORITY BATCH

### 2.1 Introduction

On Monday 6 March, the Computer Centre will introduce a 'low priority' batch processing service. Work submitted for low priority batch processing on any day will generally be processed overnight and be available for collection on the following working day. Such work will attract a 20% discount off the normal charges.

The Centre has two aims in introducing this service:

- (a) to provide a computing service for teaching purposes at the lowest possible charge,
- (b) to encourage users with large and costly jobs to process their work via the batch processing service in off-peak periods.

Naturally any user may make use of this service.

### 2.2 Running of Low Priority Jobs

New job identification cards and a number of special card input trays have been provided for low priority batch work.

#### (a) Job identification cards

Users who wish to run their work via the low priority batch service should place a new 'LOW PRIORITY' job identification card on the front of their deck, instead of the normal purple job identification card. The new job identification cards are white with green printing and green top edge, and are clearly labelled LOW PRIORITY as shown overpage.

The present purple job identification cards are retained and should be used for all standard priority work.

UNIVERSITY OF QUEENSLAND COMPUTER CENTRE

**PDP 10 JOB IDENTIFICATION CARD**

Project Number ..... Date .....

Authorized User's Name ..... Phone .....

Authorized User's Signature .....

**LOW PRIORITY**

(b) Input card trays

Two sets of input card trays will now be available for PDP-10 batch work. Low priority batch work should be placed in the trays labelled:

PDP10  
LOW PRIORITY

The existing input trays will continue to be used for standard priority work.

2.3 Conditions of Service

The new low priority batch service will be provided under the following conditions:

- (a) no low priority work will be processed before 8 p.m.
- (b) standard priority work will take precedence over low priority work at all times
- (c) any low priority work remaining unprocessed when the Centre shuts down will be held over until the following evening

It is proposed that these arrangements will be reviewed with the introduction of third shift operation within the Centre.

### 3. BATCH AND LOGIN

New versions of Batch and Login have been implemented to allow low priority batch processing.

### 4. MODIFICATIONS TO STUDENT ACCOUNTING SYSTEM

If an IDENT command for a student job is missing, or contains a syntax error which prevents it being processed as an IDENT, that student job will become part of the main job with the balance of the job limit as the only cost limit in force. This could result in large expenditure by an uncontrolled student job.

The solution to this problem has been to modify QUIT so that, instead of clearing the cost limit, it will now reset the student cost limit to the value specified by the latest SACS command.

Thus if the main job is to include any processing with a cost limit other than that set by the initial SACS command, the administrator should insert a second SACS command, defining the new limit, at the appropriate point in the job. This command must be followed by a QUIT to set that limit. This limit may be greater than the balance of the job limit without being rejected as it would be by an IDENT. A QUIT has the function of clearing the loadlist and job error count and setting the student limit, whether or not there was a corresponding IDENT.

Note that all effective SACS commands will be echoed as part of the main job output.

### 5. JOBTIM

A new function, JOBTIM, will be added to the FORTRAN library on Tuesday 7 March. JOBTIM returns the total CPU time since login in milliseconds.

example:

MSECS = JOBTIM(0)

the result is an integer number of milliseconds

6. COPY(COMPRESS)

Further to the note in the newsletter, WN-75, COPY(COMPRESS) has now been corrected and works correctly through batch and remote terminals.

7. NEW VERSION OF CREF

A new version of CREF, version 45(12)-2 will be implemented on 7 March 1972.

8. COBOL THROUGH BATCH

Users submitting COBOL jobs through batch must specify the name of the source file on the COBOL command. There is an error in the present decoder so that commands such as

.COBOL(LIST)

will not assume the source program to be coming from the job input device.

Users must first copy their source program to disk and then compile the source file

.COPY TO=SOURCE/CBL

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.COBOL(LIST) SOURCE/CBL

9. PDP-10 FORTRAN IV COMPILER ERRORS

9.1 Common Subscript Expressions

Use of a common subscript expression as in

A(I,J)=B(I,J)

where A is real and B double or complex, will yield improper results.

A possible cure is to split the statement into two parts or to use an expression such as

    A(I,J)=SNGL(B(I,J))  
or   A(I,J)=REAL(B(I,J))

## 9.2 Mixed Mode Expressions

(a) expressions such as

    complex = complex-subexpression + real-subexpression

may yield incorrect results. A cure is to replace such an expression by

    complex =  
    complex-subexpression + CMPLX(real-subexpression,0.0)

(b) the statement

    double = double/FLOAT(integer)

creates incorrect code. The statement

    double = double/integer

however produces correct code.